

General

Title

Primary open-angle glaucoma (POAG): percentage of patients aged 18 years and older with a diagnosis of POAG whose glaucoma treatment has not failed (the most recent IOP was reduced by at least 15% from the pre-intervention level) OR if the most recent IOP was not reduced by at least 15% from the pre-intervention level, a plan of care was documented within 12 months.

Source(s)

American Academy of Ophthalmology (AAO). Eye care quality measure: POAG: reduction of IOP by 15% or documentation of a plan of care. Version 9.1. San Francisco (CA): American Academy of Ophthalmology (AAO); 2015 Jan. 5 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Outcome

Secondary Measure Domain

Clinical Quality Measure: Process

Brief Abstract

Description

This measure is used to assess the percentage of patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG) whose glaucoma treatment has not failed (the most recent intraocular pressure [IOP] was reduced by at least 15% from the pre-intervention level) OR if the most recent IOP was not reduced by at least 15% from the pre-intervention level, a plan of care was documented within 12 months.

Rationale

1. Scientific basis for intraocular pressure (IOP) control as outcomes measure (intermediate)
Analyses of results of several randomized clinical trials all demonstrate that reduction of IOP of at least 18% (Early Manifest Glaucoma Trial [EMGT], Collaborative Initial Glaucoma Treatment Study

[CIGTS], The Advanced Glaucoma Intervention Study [AGIS], Collaborative Normal-Tension Glaucoma Study [CNTGS]) reduces the rate of worsening of visual fields by at least 40%. The various studies, however, achieved different levels of mean IOP lowering in realizing their benefit in patient outcomes, ranging from 18% in the "normal pressure" subpopulation of EMGT to 42% in the CIGTS study. As such, an appropriate "failure" indicator is to NOT achieve at least a 15% IOP reduction. The rationales for a failure indicator are that 1) the results of different studies can lead experienced clinicians to believe that different levels of IOP reduction are appropriate; 2) to minimize the impact of adverse selection for those patients whose IOPs are more difficult to control; and 3) because each patient's clinical course may require IOP reduction that may vary from 18% to 40+%.

In addition, "...several population based studies have demonstrated that the prevalence of primary open-angle glaucoma (POAG) as well as the incidence of POAG increases as the level of IOP increases." These studies provide strong evidence that IOP plays an important role in the neuropathy of POAG. Furthermore, studies have demonstrated that reduction in the level of IOP lessens the risk of visual field progression in open-angle glaucoma. In addition, treated eyes that have a greater IOP fluctuation are at increased risk of progression.

Intraocular pressure is the intermediate outcome of therapy used by the U.S. Food and Drug Administration (FDA) for approval of new drugs and devices and, as noted above, has been shown to be directly related to ultimate patient outcomes of vision loss. As such, failure to achieve minimal pressure lowering, absent an appropriate plan of care to address the situation, would constitute performance whose improvement would directly benefit patients with POAG.

2. Evidence for gap in care

Based on studies in the literature reviewing documentation of IOP achieved under care, the gap could be as great as 50% or more in the community of ophthalmologists and optometrists treating patients with POAG. Based on loose criteria for control, IOP was controlled in 66% of follow-up visits for patients with mild glaucoma and 52% of visits for patients with moderate to severe glaucoma. Another study of a single comprehensive insurance plan suggested that a large proportion of individuals felt to require treatment for glaucoma or suspect glaucoma are falling out of care and are being monitored at rates lower than expected from recommendations of published guidelines.

Clinical Recommendation Statements:

When initiating therapy, the ophthalmologist assumes that the measured pretreatment pressure range contributed to optic nerve damage and is likely to cause additional damage in the future. Lowering the pretreatment IOP by 25% or more has been shown to inhibit progression of POAG (American Academy of Ophthalmology [AAO], 2010).

Choosing an even lower target IOP can be justified if there is more severe optic nerve damage, if the damage is progressing rapidly, or if other risk factors such as family history, age, or disc hemorrhages are present.

Please note that the American Optometric Association's (AOA) 2002 guideline on open-angle glaucoma was not reviewed during the development of this measure prior to the public comment period and therefore is not presented here verbatim. Review of the AOA guideline subsequent to initial measure development indicates that the recommendations in the AOA guideline are consistent with the intent of the measure. This also applies to the 2010 guidelines. As such, the intent of this measure is to have this indicator apply to both optometrists and ophthalmologists (and any other physician who provides glaucoma care); the use of "ophthalmologists" only in the preceding verbatim section reflects the wording in the AAO Preferred Practice pattern.

Evidence for Rationale

American Academy of Ophthalmology (AAO). Eye care quality measure: POAG: reduction of IOP by 15% or documentation of a plan of care. Version 9.1. San Francisco (CA): American Academy of

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Primary Health Components

Primary open-angle glaucoma (POAG); intraocular pressure (IOP)

Denominator Description

All patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG) (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Patients whose glaucoma treatment has not failed (the most recent intraocular pressure [IOP] was reduced by at least 15% from the pre-intervention level) OR if the most recent IOP was not reduced by at least 15% from the pre-intervention level a plan of care was documented within 12 months (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

The reporting period

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

All patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG)

Note: Refer to the original measure documentation for International Classification of Diseases, Ninth Revision (ICD-9), ICD-10, and Current Procedural Terminology (CPT) codes.

Exclusions

Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Patients whose glaucoma treatment has not failed (the most recent intraocular pressure [IOP] was reduced by at least 15% from the pre-intervention level) OR if the most recent IOP was not reduced by at least 15% from the pre-intervention level a plan of care was documented within 12 months

Note:

Plan of Care: May include recheck of IOP at specified time, change in therapy, perform additional diagnostic evaluations, monitoring per patient decisions or health system reasons, and/or referral to a specialist.

Plan to Recheck: In the event certain factors do not allow for the IOP to be measured (e.g., patient has an eye infection) but the physician has a plan to measure the IOP at the next visit, the plan of care code should be reported.

Glaucoma Treatment Not Failed: The most recent IOP was reduced by at least 15% in the affected eye or if both eyes were affected, the reduction of at least 15% occurred in both eyes.

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Registry data

Type of Health State

Physiologic Health State (Intermediate Outcome)

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Primary open-angle glaucoma (POAG): reduction of intraocular pressure (IOP) by 15% OR documentation of a plan of care.

Measure Collection Name

Eye Care Quality Measures

Submitter

American Academy of Ophthalmology - Medical Specialty Society

Developer

American Academy of Ophthalmology - Medical Specialty Society

Funding Source(s)

American Academy of Ophthalmology (AAO)

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Financial Disclosures/Other Potential Conflicts of Interest

None

Endorser

National Quality Forum - None

NQF Number

not defined yet

Date of Endorsement

2009 Oct 30

Measure Initiative(s)

Physician Quality Reporting System

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Jan

Measure Maintenance

Reviewed and updated if appropriate on an annual cycle

Date of Next Anticipated Revision

Measure Status

This is the current release of the measure.

This measure updates a previous version: American Academy of Ophthalmology, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Eye care physician performance measurement set. Chicago (IL): American Medical Association (AMA); 2010 Sep. 35 p.

The measure developer reaffirmed the currency of this measure in December 2015.

Measure Availability

Source not available electronically.

For more information, contact the American Academy of Ophthalmology (AAO) at 655 Beach Street, San Francisco, CA 94109; Phone: 415-561-8500; Fax: 415-561-8533; Web site: www.aao.org

NQMC Status

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The information was reaffirmed by the measure developer on December 16, 2015.

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For more information, contact Debra Marchi at the American Academy of Ophthalmology (AAO), dmarchi@aao.org, regarding use and reproduction of these measures.

Production

Source(s)

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